



SPARK GAP

Vol. 34, Issue 8 August 2017 *MARC - Serving Central Indiana Communities for thirty-four years*

On Our MARC:

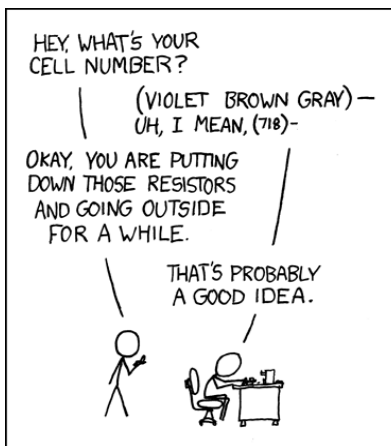
I can't believe that another summer has come and almost gone. Where did the time go? MARC events for the year has come and gone too. We have a few left for the year. Greenwood Band Contest, Heartnut, Goblin Patrol and most important, MARC annual picnic!!

It's not too late to throw your hat into the ring for an officer's position in the MARC for the 2017-18 year. If you hold a valid Amateur Radio license and your dues are current, full member of the club, you can run for President, Vice President, Secretary or Treasurer. If you wish to run or would like to nominate someone else for a position, please contact Rhonda Curtis at secretary@midstatehams.org or Marlys Barr at treasurer@midstatehams.org. Before nominating someone, please check with them to see if they are interested in an office. The slate will be finalized at the meeting on Aug. 19th with balloting up until the annual picnic on Sept. 16th. Once the slate is finalized, Rhonda will email out all ballots to paid members and if we don't have an email address, she will mail you one.

Speaking of the picnic, it is a great family event. Again this year we will be headed to Steve Brown's, N9LC, home in Franklin. Steve and his wife have graciously welcomed us for another year and the location couldn't be any better. Hopefully the weather will be just as nice. Your admission is a covered dish or another item to share and a lawn chair to "sit a spell." The club will provide the meat, the drinks and the paper goods. See all of you there!

Hope to see you on Saturday. The coffee will be on.

Jacki – KI6QOG
President





Birthdays for the month of August:

K9JGB – GRANT BLACK

N9CHY – CY YOUNG

Top 30: You Can Tell You're A Radio Nut when... (circa 1989)

1. You remember the exact date and time that lightning hit "the tower". The whole radio room was burned to a crisp, but you tell friends, "at least my wife wasn't home when it happened."

2. You'll spend hundreds of dollars on a new rig, and then wander the hamfest pausing each time you pass the booth selling those \$7 embroidered callsign hats thinking "I wonder if they'll take \$6?"

3. You're a CBer who buys a new \$300 five-watt, perfectly operating rig, opens the cabinet to "tweak" it to 20 watts, knowing full well it'll end up being sent back to the company for repair. The radio comes back, and a few weeks later you repeat the process - by watching your CBer friend from across town do surgery on your radio.

4. When shopping for a new vehicle the first think you look for is space to mount the radios - you end up sitting in the front seat staring blankly at the dashboard area, feeling underneath seats, and poking around the backseat for ways to route the coax. If caught looking under the hood for holes in the firewall for your power cables, you tell your wife, "Nothing honey, just checking things under here."

5. Your family has a special annual garage sale just to get rid of the boxes of wire, coax, and power adapters-but you pay your friends to "buy" the stuff and get them to quietly return it to you the following weekend.

6. You absolutely need a radio with thousands of channels - even though you live in a town with three cops and a volunteer fire department and the airport is 350 miles away.

7. In your determination to get that new vertical antenna up, or longwire strung in the backyard, you tell family and neighbors that "it's only temporary - I'm testing it for this guy."

8. The \$10 bargain you got at the fleamarket that smoked up the whole house when you turned it on is one of your prized possessions.

9. You'd rather sell your family's TV and VCR than give up the box of vacuum tubes you got at a "bargain" even though 90% of them are dead.

10. It still doesn't matter to you if the antique radio you brought home was an apartment for mice.
11. You're not speaking to your elderly neighbor because last week just as you tuned Radio Kiribati, he turned on his power drill.
12. Your wife has called you three times for dinner - then she calls you on the repeater.
13. You're the only one in your family that understands the real meaning of CW. And you get stressed out if someone's CW transmission rate varies from one to 75wpm with no warning.
14. When going on vacation, the first thing you think about packing is your handhelds, chargers, scanner and frequency book.
15. You take your scanner to work disguised as a cell phone.
16. You acknowledge conversations with your family and friends by saying 10-4 - and they think it's normal.
17. The total number of radio related books in your home are five times the total number of all other books and magazines.
18. You store extra "emergency" AA batteries in the refrigerator.
19. You're immediately recognized and spoken to by name at your favorite radio dealers.
20. You think a good time is "breaking in" a new part-time Radio Shack employee with your radio wisdom.
21. Your spouse goes to the supermarket while you "look around" in Radio Shack.
22. You visually check your outdoor antennas and coax once a week, regardless of the weather.
23. People ask you to turn down the volume on the radios when they call you.
24. The total number of antennas on your house is greater than six other houses on your block-counting the ham down the street.
25. You've considered contacting NOAA offering your voice as a substitute for that awful sounding mechanical computer-generated voice.
26. People keep asking your family about the "light that's always on" in the back room where your radio shack is located.
27. More than 95% of the photos in your family album show you with a radio strapped to your belt or a microphone in your hand.
28. You have more certificates and licenses on the wall than your local veterinarian or dentist.
29. Your cat or dog instinctively knows not to bother you when you're in your radio shack.
30. All the local cops know your vehicle on sight - "it's the blue Crown Vic with six antennas".

C.E.R.T Class July 2017

Nearly two dozen MARC members signed up for a two day CERT class July 22 and 23rd. The fifteen hour course educates Community Emergency Response Team members about disaster preparedness for hazards in their neighborhood. It covers basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations.

Tim White, KD9ISF, a retired Johnson county sheriff's deputy, taught the course. Tim is a newly licensed ham and looks forward to augmenting CERT training with amateur radio.

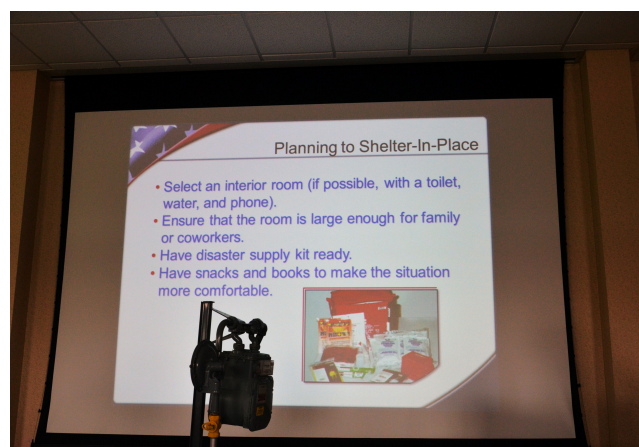
One of the class highlights was playing victim while team members applied first aid dressings and splinted arms and legs. Classroom tables were made into make shift gurneys.

The two day course prepares CERT volunteers to assist others in their community following a disaster when professional responders are not immediately available to help. The Mid-State ARC plans to offer additional CERT training in the future. This class was held at the REMC Headquarters on International Blvd. Each student received a CERT backpack containing tools, safety helmet and vest, flashlight, AM/FM radio and other first aid supplies.

Additional class pictures can be found on the midstatehams.com web site. Kevin Nuetzman-K9NTZ has posted class photos on the web site.
-w8ish



Instructor Tim White, KD9ISF



Shelter-in-place planning



CERT bag check



Medical kit - bag and contents



CERT helmet check



CERT tools



CERT computer



Cute helmet Marlys



HELP NEEDED FOR EVENTS!

There are two big events in August and September that need the help by club members along with ARES and RACES members. The first event is the Greenwood Community Band Festival held in Serena Park Amphitheater on Saturday August 26th. Amateurs will be needed to help with parking in and around the event site and spread out in the park area. There will be a shuttle service available so patrons can catch a ride to the amphitheater to hear the bands. There are six bands that will be performing and they come from different parts of the state and should start arriving in the morning so we will need to be there to assist. It would be good to have eight to ten hams to help with this event. I will send out more detail in an email of the starting time. It is scheduled to end about 6:00 PM.

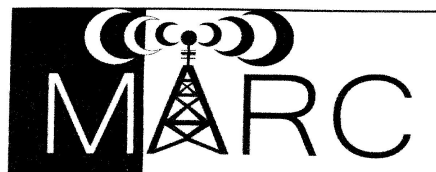
The second event is the Greenwood High School Marching Band Invitational located at the Greenwood High School located on Smith Valley Road between US 31 and Averitt Rd. GHS has made improvements to the parking lots this year and should not be as “jumbled as last year” so things should go much smoother. This is a large event with sometime up to twenty bands participating and hundreds of fans attending to watch the competition. MARC has been involved for almost twenty years with the GHS Marching Band Invitational and provide our expertise in parking and public safety.

For both of these events you will need your favorite HT, a charged extra battery pack, comfortable shoes, water, safety vest and a flashlight with a safety wand so you can be seen during the evening hours. Parking at the High School will be for bands and handicapped patrons only. Additional parking will be at Woodman Park and the New Middle school located not too far away on Averitt Road.

We will also be able to take a break and eat food and refreshments provided by the GHS Band Parents. There is a need to have at least 15 to 18 hams helping with this event. If you can help for only a couple of hours so the ones working can have a break and get off their feet. We are never sure what the weather will be for this event so dress accordingly and make sure to wear some HAM related gear. This is a time for Amateur Radio to shine before the public and as we do our public service.

There will be a sign-up sheet at the next MARC club meeting if you have not committed to help with this event.

..... 73, Bob N9SIU



Contact Your Senators *Right Now* for Passage of the Amateur Radio Parity Act!

The Amateur Radio Parity Act holds special significance for us in the ARES community who prepare our portable, mobile *and home* stations for emergency/disaster response communications for the safety, health and welfare of our families, friends and neighbors, community and partner agencies. We can't do it without good antennas!


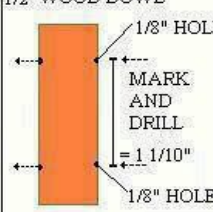
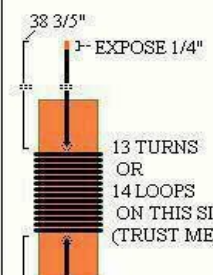
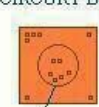
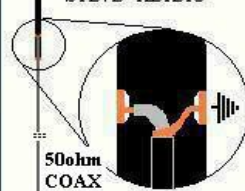
The Amateur Radio Parity Act was passed unanimously by the House of Representatives in January as H.R. 555. It provides a mutually satisfactory compromise reached between the American Radio Relay League (ARRL, the national association for Amateur Radio) and the Community Associations Institute (CAI, which represents home owners associations). The Senate Bill, S. 1534, allows for effective outdoor Amateur Radio antennas for public service and emergency communications while protecting the prerogative of community associations.

Please take action and urge your Senators to pass S. 1534. I did, this week! The ARRL has set up a special web utility that makes contacting your senators as easy as possible; it took me only one minute to process and send my letters to my senators.

Go to the ARRL web site for more information: www.arrl.net

..... ARRL News August 2017

2 Meter Homebrew Vertical Antenna: This antenna is a 1/2 wave co-linear design and is built inside a 10 foot piece of 3/4 inch PVC water pipe. It is omnidirectional and has the gain of a small beam. Best of all, it can be built for less than \$10. Good luck!

PARTS	STEP 1	STEP 2	STEP 3	SHOULD LOOK LIKE THIS
<ul style="list-style-type: none">□ 3/4" PVC END-CAP10', 3/4" PVC IPS SCH401/2" WOOD DOWL: CUT 2" LONG10' OF HOOK-UP WIRE: 20 GAUGE SOLID INSULATED■ COPPER CLAD 1"x1" CIRCUIT BOARD20" OF 300 ohm TWIN LEAD WIRE NOT FOAM TYPE2 WIRE TIESA PIECE OF FOAM RUBBER TO STUFF INTO THE BOTTOM	<p>STRIP 1/2" OFF BOTTOM, TWIST WIRES TOGETHER, AND SOLDER</p> <p>NOW MEASURE AND EXPOSE ABOUT 1/8" OF TWIN LEAD WIRE ON BOTH SIDES</p> <p>STARTING FROM THE BOTTOM, MEASURE AND CUT = 16 7/10"</p> <p>LAST CUT IN STEP 1</p> 	<p>1/2" WOOD DOWL</p> <p>1/8" HOLE</p> <p>MARK AND DRILL</p> <p>= 1 1/10"</p> <p>1/8" HOLE</p> <p>NEXT ADD WIRE</p> <p>38 3/5"</p> <p>EXPOSE 1/4"</p> <p>13 TURNS OR 14 LOOPS ON THIS SIDE (TRUST ME)</p> <p>38 3/5"</p> <p>EXPOSE 1/4"</p> <p>ON TO THE NEXT STEP</p>  	<p>CIRCUIT BOARD</p>  <p>CUT INTO A CIRCLE THAT IS BIGGER THAN THE INSIDE DIAMETER OF THE PVC PIPE AND SMALLER THAN THE OUTSIDE DIAMETER OF THE PIPE</p> <p>DRILL A SMALL HOLE IN THE CENTER OF THIS CIRCLE AND SOLDER ONE END OF THE COIL WIRES TO IT</p> <p>SOLDER OTHER END OF THE COIL TO THE EXPOSED WIRE OF THE TWIN LEAD</p>	<p>ADD SOME RG-58 COAX, SEE DIAGRAM BELOW</p> <p>WIRE TIE THE LOWER SECTION OF THE TWIN LEAD TO THE COAX</p> <p>CAREFULLY FEED THE COAX AND ANTENNA THROUGH THE PVC</p> <p>GLUE END CAP ON TOP</p> <p>STUFF THE FOAM RUBBER IN THE BOTTOM END TO KEEP BUGS OUT</p> <p>HAVE FUN! STEVE KB1DIG</p>  <p>50ohm COAX</p>

Get with the SET:

ARRL Simulated Emergency Test (SET) Fall Classic Just Ahead

The main weekend for the 2017 ARRL Simulated Emergency Test (SET) is just a bit more than a month away -- Saturday and Sunday, October 7 and 8. The primary League-sponsored national emergency exercise is designed to assess the skills and preparedness of ARES and other organizations involved with emergency/disaster response.

"Every local ARES team and/or ARRL Section will come up with their own scenarios and work with [served agencies and partner organizations](#) during the SET," ARRL Field Organization Team Supervisor Steve Ewald, WV1X, said, noting that not all SETs will take place on October 7 and 8.

"SETs can be scheduled at the local and Section levels and conducted throughout the fall season to help maximize participation," he said, "and ARRL Field Organization leaders have the option of conducting their SETs on another weekend, if October 7 and 8 are not convenient."

ARRL Field Organization Leaders -- Section Managers, Section Emergency Coordinators, Section Traffic Managers, District Emergency Coordinators, Emergency Coordinators, and all of their Assistants and Net Managers -- are among those tasked with developing plans and scenarios for this year's SET, Ewald explained.

"The SET invites all radio amateurs to become aware of emergency preparedness and available training," Ewald said. "ARES, Radio Amateur Civil Emergency Service (RACES), National Traffic System™, SKYWARN, Community Emergency Response Team (CERT), Salvation Army Team Emergency Radio Network (SATERN) and other allied groups and public service-oriented radio amateurs are encouraged to participate."

The object of the annual nationwide exercise is to test training and skills and to try out new methods. "It's a time to work with partner organizations and served agencies to get to know them better and to determine their needs *before* an emergency or disaster strikes," Ewald said. "Knowing whom to contact within partner groups with the planned procedures will help everyone to accomplish their goals and succeed in their missions."

Over the decades, ARRL has established strong working relationships with such organizations and agencies as the Federal Emergency Management Agency (FEMA), the American Red Cross, The Salvation Army, the National Weather Service, the National Communications System, the Association of Public-Safety Communications Officials- International (APCO-International), Citizen Corps, National Voluntary Organizations Active in Disaster (NVOAD), REACT International, the Society of Broadcast Engineers (SBE), the US Power Squadron, and the Boy Scouts of America.

"Getting to know these organizations at the local, section, and state levels and how to work together for effective emergency and disaster response service is important," Ewald said. "The annual Simulated Emergency Test provides the chance, and you and the radio amateurs of your community help make it happen."

To get involved, contact your local ARRL Emergency Coordinator or Net Manager. See the [ARRL Sections](#) web pages or your ARRL Johnson Co. EC Bob N9SIU n9siu@arrl.net

..... *ARRL NEWS August 2017*

The Solar Eclipse QSO Party — Are You Ready?

From 1400 – 2200 UTC on August 21, 2017, hams will have the Sun's shadow in their sights.

Ward Silver, NØAX

The objective of the Solar Eclipse QSO Party (SEQP) is to flood the airwaves with contacts, all measured by the automated receiver networks of the Reverse Beacon Network, PSKReporter, and WSPRNet. When those observations are combined with the logs from individual stations, the result will be one of the largest ionospheric experiments ever performed. Here's how hams can have a starring role.

Start by taking the day off on Monday, August 21. The SEQP starts well before the eclipse begins on the western coast of Oregon. Begin making contacts right away to establish what the bands are like before the shadow starts digging a trench through the ionization "up there." As the penumbra starts cutting into the solar disc, operate on lots of bands (multioperator, anyone?) or focus on a favorite. Even if the higher bands aren't too lively, be sure to cast some CQs there, because the network receivers will be looking for signals, and you can get bonus points for being spotted. That's certainly a first!

Be sure you have the latest version of



your logging software and that it can accept the signal report and grid locator. Hopefully, your software will support the SEQP — check before the big day. In a pinch,

you may be able to use software that supports the ARRL VHF+ contests.

Bonus Points

The SEQP features a long list of bonuses similar to Field Day.

- Operate during totality at your location: 100 points
- Operate outdoors: 100 points
- Operate in a public place: 100 points
- Provide detailed station information: 50 points each for antenna information, HFTA terrain profile, ground conductivity, and station ERP on each band
- Operate a wide-band automated receiver at your station: 50 points
- One point for being spotted in a grid outside your own during each hour, and on each band and mode — CQ SEQP!

What Happens Next

After we finish creating data, be sure to submit your log as described in the SEQP rules at www.hamsci.org/seqp. A group of researchers at Virginia Tech will process the data from each log and from all of the automated receiving networks. This will create the largest set of measurements from any amateur event ever.

The work begins in earnest once the data is in. The research community will go to work to validate their existing propagation models while looking for unexplained behaviors. As Isaac Asimov is reputed to have said, "The most exciting phrase to hear in science, the one that heralds new discoveries, is not 'Eureka' but 'That's funny...'"

Hams have been supporting scientific efforts since the earliest days of radio by doing things like keeping in touch with expeditions and making on-the-air measurements. The coming solar eclipse is the latest opportunity to participate in advancing our understanding of the world in which we live, and make a few contacts, too.

Eclipse Mob

The eclipse won't just affect the MF and HF bands, but the VLF bands, too. The Eclipse Mob group (www.hamsci.org/article/eclipsemob-low-frequency-effort) has a low-cost, easy-to-build receiver and smartphone app, so anyone can participate. No license is required, and observing can take place all year long.

How to Participate

The Solar Eclipse QSO Party runs from 1400 – 2200 UTC on August 21. Exchange a signal report and your six-character grid locator on 160 – 6 meters (not on 60, 30, 17, and 12 meters, please). You can work stations again after 10 minutes to make as many "observations" (contacts) as possible. CW, RTTY, and PSK31 are preferred because automated receiving networks will record the contacts, but contacts on any digital mode and phone are fine too. See www.hamsci.org/seqp for scoring information, bonus points, operating guidelines, and complete rules.

"You'll Put Your Eye Out!"

Sure, it's amazing, but don't look at the Sun directly, or through any kind of magnifying device — whether during an eclipse or not. You can find out how to watch safely at www.skyandtelescope.com/astronomy-news/observing-news/view-the-sun-safely. Solar observing is great at any time — why not try to spot a sunspot?

Learn more!

www.arrl.org/what-is-ham-radio

The Amateur's Code

by Paul M. Segal, W9EEA (1928)

The Radio Amateur is:

CONSIDERATE never knowingly operating in such a way as to lessen the pleasure of others.

LOYAL offering loyalty, encouragement and support to other amateurs, local clubs and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.

PROGRESSIVE with knowledge abreast of science, a well built and efficient station, and operation beyond reproach.

FRIENDLY with slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

BALANCED Radio is an avocation, never interfering with duties owed to family, job, school or community.

PATRIOTIC with station and skill always ready for service to country and community.

Radio Amateurs in Atlantic Canada Go on Standby During Telephone Outage

08/09/2017

Atlantic Canada authorities called on Amateur Radio operators in parts of Nova Scotia on August 4, in the wake of a telephone service outage. According to CBC, Bell Aliant landline and cell services were down, starting at approximately 11:20 AM. Telus, Virgin, and Koodo users were also affected. Jeremy Fowler, VE1JHF, a member of the Halifax Amateur Radio Club, said he and other members of his group were put on standby to help the municipality cope with any communication problems.

“[A] bunch of us pulled out our gear and were on the air, ready to go, cars loaded up,” he told CBC. “At that point, everything was kind of coming online, so they told us to stand down.”

Martin Swinimer, VE1KLR, expressed surprise that emergency services didn't try to contact him to assist with communications. He and Chris Vessey VY2CRV, in Charlottetown, Prince Edward Island, said they were on stand-by as well.

Vessey told CBC that the phone outage might serve as a wake-up call, and he'd like the public be better educated on how ham radio works, in the event of another phone outage or emergency situation. The outage was blamed on damage to two optical fiber lines, and even emergency responders across the region experienced some disruption in connectivity.

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UP – COMING ACTIVITIES AND HAMFESTS

08/19/2017- 0800 MARC Monthly meeting at the New Location. Johnson County REMC 750 International Drive Franklin, IN 46131.

08/26/2017 – Greenwood Community Band Festival, more information to follow.

09/09/2017 – Johnson County “Heartnut Festival” Johnson County Park

09/16/2017– 0800 - MARC Monthly club and annual picnic, more information to follow.

09/23/2017 – Greenwood Marching Band Invitational, Greenwood High School. More info to follow.

09/30/2017 – Statewide Simulated Emergency Test

10/21/2017 – 0800 MARC Monthly meeting at the New Location.

10/31/2017 – Halloween – Goblin Patrol – after 1830

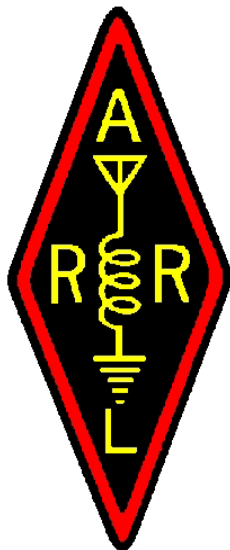
Johnson County REMC 750 International Drive Franklin, IN 46131.

11/18/2017 – 0800 MARC Monthly meeting at the New Location.

Johnson County REMC 750 International Drive Franklin, IN 46131.

12/16/2017 – 0800 MARC Monthly meeting at the New Location.

Johnson County REMC 750 International Drive Franklin, IN 46131.



MID-SATE AMATEUR RADIO CLUB

The Mid-State Amateur Radio Club meets the **THIRD SATURDAY** of each month at the Johnson County REMC 750 International Drive Franklin, IN 46131.

See our website, www.midstatehams.org, for maps on how to get to our meeting.

Everyone is welcome; you do not have to be a *HAM* to attend our meetings or a member of the club.

WA9RDF Repeater:

146.835/
146.235 MHz
(151.4 Hz PL Tone)

Club Officers:

President: Jacki Frederick – KI6QOG
Vice President: Bruce Tisdale -- K9ICP
Secretary: Rhonda Curtis – WS9H
Treasurer: Marlys Barr – KD9BHM
Repeater Trustee - Chris Frederick – KQ9Y

WA9RDF Repeater:

443.525/
448.525 MHz
(151.4 Hz PL Tone)

Weekly Net: Sunday evening 7:00 PM ARES/RACES members and ALL RADIO AMATEURS
146.835/146.235 MHz (151.4 Hz PL Tone)

The Official Newsletter of the Mid-State Amateur Radio Club

P.O. Box 836
Franklin, Indiana
46131

Spark Gap Editor: Robert LaGrange N9SIU

Please send your articles to my email: n9siu@yahoo.com no later than the 3rd of the month



Special thanks to Johnson County REMC for the use of their community room for meetings and testing.